

**REMARKS**

In the present amendment, claims 1 and 21 have been amended and claim 15 has been cancelled. Accordingly, claims 1-8, 10-14, 16, and 19-21 are pending in the present application with claim 1 being independent.

Applicants note that claim 1 has been amended to recite that both conditions, i.e., (I) a porosity equal to or less than 75%, and (II) a collapsing strength equal to or more than 15Mpa, must be satisfied, and that a plurality of pellets of the bone replacement material are introducible into a cavity of a bone defective part. Support for the amendment can be found, e.g., at page 9, lines 6-10, and page 11, lines 13-21.

No new matter has been added.

**Response to new rejections under 35 U.S.C. § 103(a)**

The Office Action rejects claims 1-4, 7, 8, 10, 14, 19, and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. 2002/0026242 to Boyle et al., hereinafter “BOYLE,” in view of U.S. Patent No. 5,645,596 to Kim et al., hereinafter “KIM.” The Office Action asserts that BOYLE teaches all of the elements of present claim 1, except that “the bone replacement material has a porosity equal to or less than 75%.” The Office Action refers to KIM, which allegedly discloses ceramic vertebrae prosthesis that can be made of calcium phosphate with a preferable density of 30 to 45% (KIM, column 4, lines 32-35), and concludes that a person of ordinary skill in the art would have been motivated to modify the porosity of the implant of BOYLE to a porosity of less than 75% in view of the teaching in KIM.

In response, Applicants note that claim 15 is not rejected over BOYLE in view of KIM, and that with this amendment, the subject matter of claim 15 is incorporated into claim 1.

In view of the foregoing, Applicants respectfully request withdrawal of the obviousness rejection of claims 1-4, 7, 8, 10, 14, 19, and 20 over BOYLE in view of KIM.

The Office Action further rejects claims 1-6, 10, 14-16, and 19-21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. 2005/0038517 to Carrison, hereinafter “CARRISON,” in view of KIM.

In response, Applicants note that CARRISON does not disclose that the bone filling material (“wedges”) has both a porosity of equal to or less than 75% (condition I) and a collapsing strength of equal to or more than 15 MPa (condition II). The Office asserts that KIM remedies the deficiencies of CARRISON.

In response, Applicants respectfully disagree. KIM is directed to “a ceramic vertebrae prosthesis to be inserted in a cavity defined between upper and lower vertebra bodies with a removed intervertebral disk” (see KIM, Abstract). Accordingly, KIM teaches a specifically shaped replacement part for an intervertebral disk. There is no teaching in KIM that the disclosed material is expected to be used in form of small pellets in order to fill a cavity of a defective bone part. Furthermore, KIM does not teach condition II of the present claim 1, i.e., that “the collapsing strength is equal to or more than 15 Mpa,” and thus, fails to remedy at least this deficiency of CARRISON.

Applicants also wish to point out that KIM teaches that if the porosity is above 55%, the mechanical strength of the prosthesis is too low to resist the compression stress (see column 4, lines 40-44).

In view of the foregoing, Applicants respectfully submit that a person of ordinary skill in the art would not have been motivated by the teaching of KIM to modify the material taught in

CARRISON to a material having I) a porosity equal to or less than 75%, and II) a collapsing strength equal to or more than 15Mpa. Applicants submit that KIM and CARRISON, even if combined, fail to result in the presently claimed invention.

Applicants respectfully request withdrawal of the obviousness rejection of claims 1-6, 10, 14-16, and 19-21 over CARRISON in view of KIM as well.

The Action also rejects claims 11-13 over CARRISON in view of KIM, and further in view of SHIMP (U.S. Patent Application Publication No. 2004/0052829).

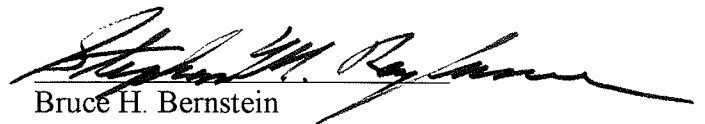
As noted above, Applicants have amended claim 1 to recite the elements of claim 15, which is not rejected over CARRISON in view of KIM, and further in view of SHIMP. As claims 11-13 depend ultimately from claim 1, which now includes the elements of claim 15, Applicants submit that the rejection should be withdrawn.

### CONCLUSION

In view of the foregoing amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow each of the pending claims.

If any issues yet remain which can be resolved by telephone, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,  
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